August 24, 2001

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director

FROM: C. H. Keilers, Jr.

SUBJECT: Los Alamos Report for Week Ending August 24, 2001

Plutonium Handling and Processing Facility (TA-55): On Wednesday, as part of a daily surveillance, TA-55 identified a high reading on a fixed head air sampler in one room, indicating an airborne release and uncontrolled spread of contamination. Access to the room was controlled pending resolution. Thirteen people have been requested to submit bio-assay samples to determine if they received an uptake. At this time, the source appears to be a mechanical seal on a glove-box vacuum pump. The facility is considering backfitting seal-less pumps as a long-term solution.

On Thursday, TA-55 moved several hundred TRU waste drums that were stored in a Butler building (PF-185) back into the hardened shell of the facility in order to comply with their authorization basis. This addressed concerns expressed by DOE on Wednesday that TA-55 was operating outside its authorization basis and that PF-185 had accumulated sufficient inventory to be categorized as a Hazard Category II facility, per DOE STD-1027.

It appears that, since at least 1998, PF-185 has been used for staging drums and waste containers before they are shipped out to Solid Waste Operations (TA-54). In June, while preparing a process hazards analysis (PrHA), LANL identified that these waste operations were anticipated in the current safety analysis report (1996) but relevant accidents were not addressed. PF-185 basically provides a weather-shield and airborne monitoring but little high wind, missile, or seismic protection. Many of the containers meet DOT Type A shipping requirements but are hypothesized to fail in a fire. As a result of the PrHA, TA-55 declared a Potentially Inadequate Safety Analysis (PISA) in June and implemented additional controls. In July, LANL informed DOE that a positive Unreviewed Safety Question Determination existed. Based on DOE concerns expressed to LANL this week, the facility chose to relocate the drums. This action restored operations to within the authorization basis.

Chemistry and Metallurgy Research Building (CMR): Last week, one of the DOE Facility Reps raised the question of whether the large number of ceiling tiles missing in the facility would adversely affect performance of the Safety Class fire suppression system. The ceiling tiles have been missing for several weeks to provide access for new cable runs and asbestos abatement. If a fire were to occur, the missing tiles would allow the heat layer to build up above the tiles, delaying sprinkler activation and possibly fire department response. On Tuesday, CMR management concluded that sprinkler system reliability was degraded. On Wednesday, LANL proposed and DOE approved a Justification for Continued Operation, through November, that involves posting a continuous fire watch in the affected sprinkler coverage area at all times while ceiling tiles are removed.

The site rep believes that the DOE Facility Representative should be credited for identifying the problem and the facility should be credited for following up. To prevent recurrence, it may be worthwhile for facility personnel (particularly system engineers and those preparing work packages) to receive additional training on when to enter LCO conditions, as well as on the authorization basis, the safety systems, and the assumptions made in the facility's safety analyses.